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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/686,118

10/14/2003

Brian Johnson

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04/25/2006

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EXAMINER

PORTKA, GARY J

ART UNIT

PAPER NUMBER

2188

DATE MAILED: 04/25/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/686,118

Applicant(s)

JOHNSON ET AL.

Examiner

Gary J. Portka

Art Unit

2188

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 09 March 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 67-116 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 81-116 is/are allowed.
- 6) ☒ Claim(s) 67-80 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 1/23/06, 10/14/03.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

### **DETAILED ACTION**

1. Claim 74 was amended by Applicant. Claims 67-116 are pending.

#### ***Information Disclosure Statement***

2. The information disclosure statements (IDS) submitted on January 23, 2006 was considered. Additionally, copies of previously considered IDS submitted October 14, 2003 are attached as requested.

#### ***Claim Rejections - 35 USC § 102***

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. Claims 67-80 are rejected under 35 U.S.C. 102(e) as being anticipated by Zerbe et al., US 6,950,956 B2.
5. As to claims 67-70, Zerbe discloses a method of adjusting two signals in a memory as recited, comprising determining a level of timing compensation to compensate for skew (skew shown in Figs. 3A and 3B, "calibration" for signals received at 60 and transmitted by 70 on bus 30, Fig. 6), storing values indicating compensation for internal clocks (at 62 and 72, Fig. 6), adjusting the timing of the internal clocks relative to a common clock according to the values (at 61 and 71, see Abstract, Figs. 3A, 3B, 5, and 6, col. 3 lines 18-29, col. 6 lines 58-63, and col. 7 lines 4-63). It is noted

that the compensation might also be interpreted as for two separate slaves 12, e.g., receive data at 60, store at 62, and adjust at 61 respectively for each slave.

6. As to claims 71-73, the calibration phase of Zerbe discloses the steps for determining compensation as recited (see col. 7 lines 41-53), considering the recited expected value to indicate the timing error or skew shown in Figs. 3A and 3B. Clearly the registers have the capability to increment or decrement for the most granular adjustment desired.

7. Claims 67-80 are rejected under 35 U.S.C. 102(e) as being anticipated by Dow, US 6,910,146 B2.

8. As to claims 67-70, Dow discloses the method of adjusting (see Abstract, Figs. 1, 3, and 4) including stored values adjusting clocks to compensate digital signals (see col. 4 lines 12-37, col. 5 lines 49-65).

9. As to claims 71-72, determination of compensation as recited is disclosed in the steps of Fig. 4, also Figs. 5, 8, and 9.

10. As to claims 74-80, the invention is disclosed in Zerbe and Dow substantially as described above with regard to claims 67-73; a phase adjusted clock is selected for a signal, to the extent claimed, since in both references it is determined and coupled to its receiver or transmitter.

***Allowable Subject Matter***

11. Claims 81-116 are allowed.

***Response to Arguments***

12. Applicant's arguments filed March 9, 2006 have been fully considered but they are not persuasive. Applicants argue that Zerbe and Dow do not individually adjust the timing of the data signals relative to a reference clock. However, it is not clear how "individually adjust" is required by the claim language. Also, Examiner disagrees with the statement. Zerbe states at col. 7 lines 25-31 that a single clock may be used, and thus the timing of receive and transmit clocks would be individually adjustable with respect to that common clock. Dow also mentions a single clock (see col. 3 lines 12-15). In Dow, it is clear that the transmit and receive clocks are derived from, and thus any adjustment relative to, the main clock generated at 148.

***Conclusion***

13. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Gary J. Portka whose telephone number is (571) 272-4211. The examiner can normally be reached on M-F 9:30 AM - 6:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mano Padmanabhan can be reached on (571) 272-4210. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

April 21, 2006

Gary J Portka  
Primary Examiner  
Art Unit 2188



**GARY PORTKA**  
**PRIMARY EXAMINER**